



STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION



October 21, 1996

Mr. Mark Evans
Remedial Project Manager
Department of The Navy
Northern Division
Naval Facilities Engineering Command
10 Industrial Highway
Mail Stop, #82
Lester, PA.
19113-2090

Re: Ground Water Reclassification, USN Submarine Base

Dear Sir:

After a recent discussion with Ms. Kymberlee Keckler of USEPA, Region 1, I offer this letter as a statement of the status of your ground water reclassification request for the U.S. Naval Submarine Base at Groton, Connecticut.

In April 1996 CTDEP adopted revised standards of ground water quality as provided for in Section 22a-426 of the Connecticut General Statutes. While the revisions clarify and strengthen many provisions, the portion relevant to this letter is contained in standard GW8 (copy enclosed). Standard GW8 contains all the provisions for lowering a water quality classification to GB. Paragraph GW8(B)(i) is the major change in this area. This paragraph reflects the Department's recognition that there are a number of small areas, adjacent to existing GB areas or appropriate receiving surface waters which would be more appropriately classified as GB rather than GA. In some cases they were originally designated as GA because industry had its own wells in the area. In other cases, perhaps including the Naval Submarine Base, the classification was something of a judgement call on the part of our staff.

We designed the revised standard to provide a straightforward set of tests to determine if lowering a classification is appropriate. Our environmental target is to facilitate the rapid remediation of groundwater to an appropriate level, rather than argue over an unobtainable goal.

The five tests can be summarized as follows:

- 1) All persons and properties within or downgradient of the reclassification area must be provided with potable water drawn from outside the area.
- 2) No adverse impact on adjacent surface water (GB standards must be met).

- 3) No increase in risk to public health (GB standards must be met).
- 4) Area is not hydrologically suitable for development of a significant public water supply well.
- 5) Ground water is polluted as a result of historic (pre 1981) industrial, commercial or urban development.

Your application, which was received in this office on August 12, 1996 has demonstrated compliance with the five tests. In my opinion, and in the opinion of other staff members, the area of the Naval Submarine Base is essentially an exact fit with the tests that we have specified. As a result the staff will recommend the lowering of the ground water classification to GB when this goes to hearing. It would be most unusual for the Commissioner to overturn such a recommendation, particularly when the tests are so straightforward.

Bringing this application to hearing has been delayed, through no fault of the Navy's. The cost of holding hearings on these reclassifications is significant in a time of budget constraints. Accordingly, I must wait until a reasonable number of complete applications are in hand. As of Friday, October 18, five such applications had been received. One applicant has asked that I allow him until Wednesday the 23rd to complete his application. Since he has been diligent in this task, I have agreed to that request. I will complete the Hearing Notice for transmission to the Connecticut Law Journal prior to Friday the 25th.

Based on this schedule, the notice would publish on Nov. 5, 1996, allowing a hearing on or after December 5th. I will be aiming for the earliest date. The first hearing on these reclassifications was held this past summer. That hearing considered seven applications and drew no testimony in opposition. The final decision was issued about one month following the close of the hearing and all applications were approved.

Based on the foregoing, I believe that it is reasonable to expect that the change in ground water classification would be granted prior to the end of January, 1997. If you or anyone else has questions regarding this, please call me at 860-424-3719.

Sincerely



Randy May
Supervising Sanitary Engineer

RM/hs

cc: Ms. Kymberlee Keckler, USEPA
Mr. Mark Lewis, DEP

- (B) To maintain the ground water at a quality that will not adversely affect the quality of surface waters to which such ground water discharges or prevent the maintenance or attainment of any designated or existing uses in such surface waters, and
- (C) To limit the impacts of waste discharges on ground water quality to those which, despite the use of treatment technology, cannot be avoided and which result from a discharge which is authorized by a permit under Section 22a-430 of the General Statutes.

GW6. With respect to ground water whose quality is actually higher than that reflected by the assigned classification, the Department's policy is that such ground water should be maintained at its existing high quality. To maintain such quality, the Commissioner may require that:

- (A) A new, increased, or otherwise modified discharge to such ground water shall be given treatment such that, notwithstanding such classification, the actual higher quality is maintained.
- (B) If after the adoption of these Water Quality Standards there is an unpermitted release of pollutants to ground water which is classified GB but whose quality is actually GA or GAA, such groundwater shall be remediated to the standards for Class GA or GAA.

GW7. The Commissioner may raise the ground water classification of any area if he finds that such ground water meets the standards for the higher classification.

GW8. (A) The Commissioner may consider an application to lower a ground water classification to GB. Such application shall be subject to the public participation requirements of Section 22a-426 of the General Statutes and shall:

- (i) describe the nature and extent and date of commencement of pollution of the ground water proposed to be reclassified,
- (ii) identify all sources of drinking water in the area whose ground water is proposed to be reclassified and identify all existing uses of ground water within and down gradient of such area,
- (iii) assess the potential of the subject area to produce ground water in an amount suitable for a public water supply,
- (iv) describe all past and present land uses in the subject area, with dates, and
- (v) provide such other information the Commissioner may reasonably require to determine the most appropriate ground water classification.

(B) A ground water classification shall not be lowered to GB unless the applicant has satisfactorily demonstrated that; any person within or down gradient of the area to be reclassified and extending to an area previously classified as GB or to a surface water body to which the groundwater discharges will be provided with an adequate public water supply, and that lowering of a ground water classification will not prevent attainment of adjacent surface water quality goals or present unacceptable health risks, and

- (i) That the ground water to be reclassified is polluted as a result of intense urban, commercial, or industrial development which occurred prior to 1981, and the hydrologic conditions of the subject area are not suitable for the development of a significant public water supply, or

- (ii) The ground water proposed to be reclassified is polluted and remediation of such ground water to a quality suitable for drinking without treatment is not technically practicable, or
- (iii) There is an overriding social or economic justification for reclassifying the ground water to GB and the proposed reclassification is supported by the affected municipality or municipalities, as affirmed, in writing, by the chief executive officer(s) of the municipality or municipalities. For the purpose of this Standard an "affected municipality" is one in which ground water classifications are to be altered, "social justification" means a specific social need of the affected municipality or the state and "economic justification" means avoidance of an economic impact that would substantially impair or otherwise detrimentally affect the economy of the community or the state. The applicant must also demonstrate that the purposes for the reclassification will not result in development that is inconsistent with the State Policies Plan for Conservation and Development as adopted pursuant to Section 16a-30 of the General Statutes.

GW9. The Commissioner may consider an application to lower a ground water classification to GC. Any such application shall be subject to the public participation requirements of Section 22a-426 of the General Statutes and:

- (A) Such application shall be accompanied by a completed application under Section 22a-430 of the General Statutes for a permit to discharge leachate from a solid waste land disposal facility to the subject ground water.
- (B) A ground water classification shall not be lowered to GC unless the applicant has satisfactorily demonstrated that:
 - (i) there is an overriding social or economic justification for reclassifying the ground water to GC and the affected municipality or municipalities have been notified of the proposed reclassification; and
 - (ii) the ground water proposed to be reclassified is not suitable for development of a significant public water supply and is suitable for waste treatment; and
 - (iii) the subject area is adjacent to and hydraulically connected with a surface water body classified B or SB; and
 - (iv) in a Section 22a-430 permit application the applicant has delineated the zone of influence (see standard GW10) of the ground water proposed to be reclassified as extending from the proposed solid waste land disposal facility to the receiving surface water body, and the applicant owns the land overlying such zone of influence, or has an easement with respect to such land which easement is properly recorded and provides protections, as described in subsection D(1) and D(2) of Standard GW10, or otherwise controls the zone of influence to the satisfaction of the Commissioner.

GW10. Zones of influence. The Commissioner may establish zones of influence when, in the course of permitting discharges to the ground water under Section 22a-430 of the General Statutes, he allocates ground water and soil resources for the treatment of pollutants. Within that zone of influence the Section 22a-430 permittee will be allowed to degrade the ground water such that it may not meet the standards for the assigned classification or be suitable for uses designated by these Water Quality Standards for such classification.

- A. For a subsurface sewage disposal system permitted under authority delegated pursuant to Section 22a-430-1 of the Regulations of Connecticut State Agencies to the Commissioner of Health and Addiction Services, the zone of influence shall be that area required by the minimum separating distances established in Section 19-13-B103d of the Regulations of Connecticut State Agencies.